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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/889,881	07/24/2001	Alain Vandergheynst	Q65374	3092
. 75	90 06/25/2003			
Sughrue Mion Zinn Macpeak & Seas ` 2100 Pennsylvania Avenue NW Washington, DC 20037-3213			· · EXAMINER	
			FIORILLA, CHRISTOPHER A	
	•		ART UNIT	PAPER NUMBER
			1731	ü
			DATE MAILED: 06/25/2003	,

Please find below and/or attached an Office communication concerning this application or proceeding.

	`		54.				
Office Action Summary		Application No.	Applicant(s)				
		09/889,881	VANDERGHEYNST ET AL.				
		Examiner	Art Unit				
		Christopher A. Fiorilla	1731				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
THE I - External after - If the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1)	Responsive to communication(s) filed on	<u> </u>					
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ Thi	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
·							
*	Claim(s) <u>1-12</u> is/are pending in the application						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
	Claim(s) <u>1-12</u> is/are rejected.						
-	7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
9)[]	The specification is objected to by the Examiner						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)[	a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment							
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)				
S Patent and Tr	ademark Office						

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1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- 2. The abstract of the disclosure is objected to because it contains language which can be implied (i.e. "The invention concerns") and legal phraseology (i.e. "comprises"). Correction is required. See MPEP § 608.01(b).
- An application in which the benefits of an earlier application are desired must contain a 3. specific reference to the prior application(s) in the first sentence of the specification of in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.
- 4. Figure 1 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. Figure 1 shows the MIMAS process described on page 1 of the specification. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in

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reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite in that it refers to "waste in powder form" but does not disclose the type of waste. Further, there is confusion as to whether the "scrap" and the "waste" are one in the same.

In claim 1, line 4, (U,PU) should be changed to (U, Pu) so that it is consistent with other claims and the specification (see e.g. page 1, line 3).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 9 recites the broad recitation "lubricant", and the

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claim also recites "preferably zinc stearate" which is the narrower statement of the range/limitation.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

A person shall be entitled to a patent unless -

basis for the rejections under this section made in this Office action:

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 7. Claims 1 and 3-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Bauer et al. (5,841,200).

Bauer et al. teaches the claimed process of dry recycling nuclear fuel scrap. The process disclosed by Bauer et al. includes the steps of: mixing UO<sub>2</sub>, PuO<sub>2</sub> (col. 3, step a) and milled waste pellets (col. 4, line 4-5); micronizing this blend; forced sieving; adding further UO<sub>2</sub> powder to form a second blend; pelletizing the blend; and sintering the pelletized blend. Bauer et al. also discloses that the waste material may be from the same or different processes (col. 4, lines 11-27); that sieving may be done by a screen (i.e. filter) and that up to 15 wt% recycled material may be utilized (col. 4, line 2).

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 10. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. (5,841,200) in view of either one of Su (5,324,712) and Henley et al. (5,607,297).

Bauer et al. teaches the claimed process of dry recycling nuclear fuel scrap. The process disclosed by Bauer et al. includes the steps of: mixing UO<sub>2</sub>, PuO<sub>2</sub> (col. 3, step a) and milled waste pellets (col. 4, line 4-5); micronizing this blend; forced sieving; adding further UO<sub>2</sub> powder to form a second blend; pelletizing the blend; and sintering the pelletized blend. Bauer et al. also disloses that the waste material may be from the same or different processes (col. 4, lines 11-27); that the waste material may be from production waste (col. 3, line 65) which includes both sintered and unsintered material and both milled and unmilled materials; that sieving may be done by a screen (i.e. filter) and that up to 15 wt% recycled material may be utilized (col. 4, line 2).

Bauer et al. does not disclose crushing prior to grinding. Su (col. 4, lines 26-28) and Henley et al. (col. 10, lines 6-9) disclose crushing a ceramic powder prior to milling (micronizing). It would have been obvious to one having ordinary skill in the art at the time of Art Unit: 1731

the invention to crush the materials of Bauer et al. prior to milling in order to improve milling efficiency or to improve handleability.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Fiorilla whose telephone number is 703-308-0674. The examiner can normally be reached on M-F, 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Christopher A. Fiorilla Primary Examiner

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